INFORMATION PAPER

DASG-PPM-NC
5 October 2005

SUBJECT: Avian Influenza

1. Purpose. To provide talking points about avian influenza at the request of the Command Surgeon 1st Army.

2. Talking Points.

- Presently, there is no evidence that avian influenza is spread person-to person.

- MEDCOM has issued planning guidance for pandemic disease, directing Military Treatment Facilities to work with installation commanders to appoint Public Health Emergency Officers and Installation Medical Emergency Officers who will advise the commander on public health preparedness, including restriction of movement (quarantine).

- In an influenza pandemic, limiting the spread of disease depends on rapid diagnosis, effective isolation of new cases, quarantine of exposed persons, targeted antiviral therapy and hygiene (handwashing, covering coughs, etc.).

3. Facts.

a. Pandemic influenza outbreaks are a result of new influenza viruses infecting humans, with increased illness and death rates in healthy people, more than the expected 36,000 influenza deaths in an average year in the United States.

b. The H5N1 influenza virus infection in birds is likely to continue. While no exchange of avian and human influenza virus genes has been found to date, and human-to-human transmission has not been documented, any change in the avian influenza virus allowing efficient, sustained transmission among humans could lead to a high incidence of illness and death, since humans have no immunity to H5N1 infection. The fact that H5N1 viruses have been identified in pigs (China) and felines (Thailand) is a concern because genetic exchange is more likely when the virus is capable of infecting multiple species.

c. There is no FDA-licensed vaccine to protect humans from avian influenza A (H5N1). The Department of Health & Human Services (DHHS) is coordinating vaccine development efforts. Research on a vaccine to protect humans against

H5N1 virus began in April 2005. Researchers are also beginning to develop a vaccine against H9N2, another bird influenza virus subtype. Reference virus strains have been made that allow manufacturers to produce pilot lots of H5N1 vaccine, but mass production capability will take years.

d. H5N1 virus samples from human cases in Southeast Asia show resistance to two antiviral medications commonly used for treatment of influenza (amantadine and rimantadine). Therefore, treatment options are limited to two other antiviral agents, oseltamivir (Tamiflu®, Roche) and zanamivir. Oseltamivir kills the H5N1 virus in laboratory tests, and tests in mice reveal that Tamiflu® reduces the risk of infection by 60% to 80%. However, if oseltamivir is overused, viruses can develop resistance.

e. DoD purchased 20 million capsules of oseltamivir in September 2005 as a strategic reserve to protect U.S. Forces, and military beneficiaries living outside the continental United States. This supply is sufficient to treat 17,000 sick people prevent infection for 350,000 and to provide a contingency stockpile.

f. DHHS directs the national effort for surveillance, risk assessment, vaccine development, vaccine distribution, and immunization priorities. DoD is an active partner with DHHS in this national effort. In a pandemic, DoD is in support of civil authorities through U.S. Northern Command.

g. MEDCOM plans are detailed in three documents: (1) Memo, 5 July 2005, MCPO-SA, Subject: Public Health Emergency Officer (PHEO) and Installation Medical Emergency Officer (IMEO) Appointment and Training); (2) Memo, 30 March 2004, MCPO-SA, Subject: SARS Planning Guidance and Tasking); (3) a checklist for infectious diseases subject to quarantine, as a tool to assist regional and local planning for such pandemics.

h. DoD's planning documents are at:
http://www.vaccines.mil/default.aspx?cnt=resource/planningDocumentsDisease&dID=30

i. On 1 April 2005, the President endorsed an amendment to Executive Order 13295, adding, "Influenza caused by novel or reemergent influenza viruses that are causing, or have the potential to cause, a pandemic," to the list of diseases subject to quarantine, under the Public Health Service Act (42 U.S.C. 264(b)).

j. Current response strategies are limited by the availability of rapid diagnostic capabilities, limited supplies of antiviral medications, and no licensed vaccine.

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